

# **MII Playback**

*Monthly Newsletter* August 1995 Volume 5, Number 8

---

---

## ***Inside this Issue:***

### ***Executive Commentary***

### ***News Briefs***

**Panasonic Unsnarls Traffic Jams**  
**Clint Hoffman Appointed Panasonic Display Products Manager**  
**Panasonic debuts Hi Fi VCR with Jog/Shuttle**  
**"The Creators" Receives Local Awards and National Attention**  
**Larry O. Dean on the Value of MII**  
**Gardy McGrath Captures Award Ceremony, Produces Video for SNAME '95**

### ***The Kregel Report***

**The Evolution of Editing Systems: Traditional, Non-linear, Desktop**

### ***Regular Features***

**MII Man**  
**Trading Post**  
**Job Shop**  
**Duplication Facilities**  
**Rental Facilities**  
**Dealer/Repair Centers**

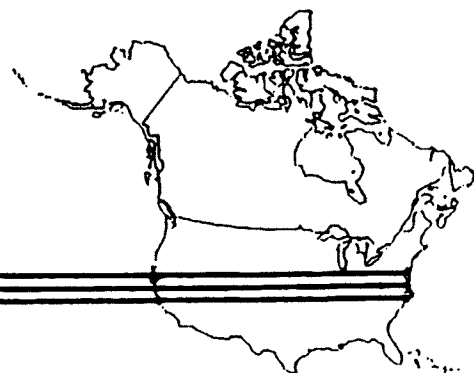
# **MII**

## ***Users Association of America***

---

---

c/o Gardy McGrath International \* 1950 Roland Clarke Pl, STE 100 \* Reston, VA 22091  
(800) 966-1030 \* (703) 620-6000 \* (703) 620-0451



## Corporate Sponsors

**JVC**  
PROFESSIONAL

**TV**  
TECHNOLOGY

**ENVISION**  
Multimedia  
Houston, Texas

**VIDEOGRAPHY**

**INMOTION**

FILM AND VIDEO PRODUCTION MAGAZINE

The above companies and publications have generously decided to sponsor the MII Users Association with an annual gift of \$250.00. We encourage members to show their appreciation to our Corporate Sponsors by supporting these organizations.

*If your company is interested in becoming a corporate sponsor of the MII Users Association for the low annual donation of \$250.00, call User Headquarters for details. Benefits include a prominent company listing with your logo on the inside front cover of each newsletter, a complimentary subscription to the newsletter, a certificate indicating your good standing with the association, and patronage from association members.*

*MIJ Playback* is a monthly newsletter published by the MII Users Association for the benefit of the members.

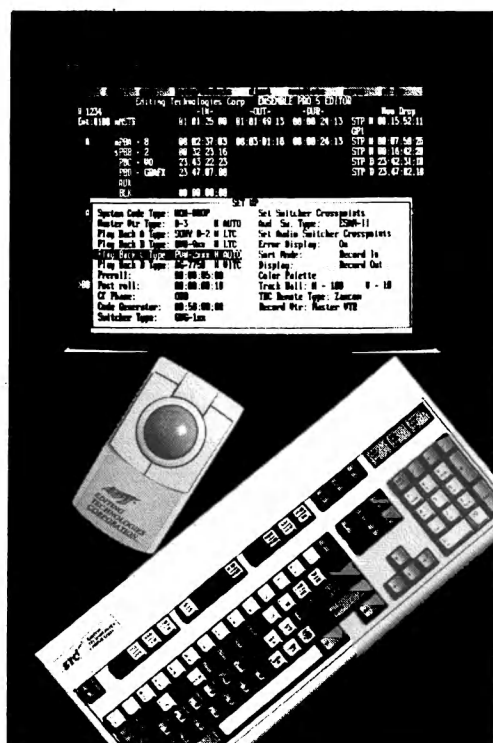
Executive Director David R. Gardy

Publications Editor Jonathan Trenn

The opinions expressed in this publication are those of the individuals quoted and do not necessarily reflect the position of Panasonic, the MII Users Association, or its members. Neither Panasonic nor the association assumes responsibility for the statements made herein nor for the alteration of any technical equipment. It is advised that you consult an authorized Panasonic dealer before attempting to repair equipment on your own.

The MII Users Association can be contacted at:  
MII Users Association  
c/o Gardy McGrath International, Inc.  
1950 Roland Clarke Place  
Suite 100  
Reston, VA 22091

800-966-1030 • (703) 620-6000  
FAX (703) 620-0451



## ENSEMBLE PRO EDITORS: ON-LINE, ON BUDGET.

The fastest, easiest, most cost effective high-powered editors available today.

☐ 10 Macros ☐ Session Logger ☐ TBC Remote Port\* ☐ 4 Channel Audio ☐ Import/Export EDLs ☐ D2/D3 Pre-Read Events ☐ 2,000 Line EDLs ☐ 10 Bins ☐ Full List Management ☐ All VTR Drivers included ☐ Auto Assemble with Pre-Cue ☐ Direct Serial Interfacing ☐ On-Line BBS Updates (FREE of charge) ☐ Switcher Upload/Download\*\* ☐ Smart Park (VTR Ballistic Auto Learn) ☐ Variable Speed Motion Control ☐ AND MORE...

Still the best choice  
for thousands less!

CALL US FOR MORE  
INFORMATION TODAY:

**805/529-7074**

**ENSEMBLE PRO 2: \$2,995**

**ENSEMBLE PRO 3: \$5,495**

**ENSEMBLE PRO 5: \$7,995**

**ENSEMBLE PRO 9: \$9,995**

**ETC!**

**EDITING TECHNOLOGIES CORPORATION**  
11992 Challenger Court, Moorpark, California 93021 • Fax: 805/529-6744

# The Battle is Over....and the Computerphiles have Won!.

## Executive Commentary

August 1995

Now I know how film people must have felt when video people took over much of the production market in the 70's. Riding the wave of the multi-media/ digital/ desk-top explosion, the computerphile now plays a bigger role in the manipulation of imagery than the videophile. The signs are everywhere. More and more of our client base seeks to take good old-fashioned broadcast quality video and degrade it through a host of compression algorithms and software packages so that it can fit into some 24 frame-per-second computer application that looks like swill. Fewer and fewer editors who work on PC-based non-linear editing systems have any experience in the linear suite. And now, when new gear comes out on the market, we find ourselves paying for time to talk on 1-800 technical support lines to solve problems from software glitches that manufacturers refuse to even admit exist in the first place. (No Windows 95 comments, please.)

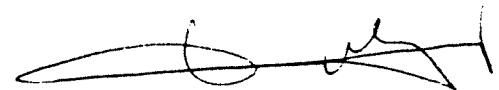
The fact is the battle is over..... and the videophiles lost. Videophiles now must lament the specter of so-called "computer geeks" who don't know the difference between a vectorscope and a time-base corrector calling themselves video producers. Of course, it was inevitable. But as videophiles assimilate into this strange new world, they must remember that their expertise is needed now more than ever. The need to insure quality production standards in the industry dictates it. Most importantly, videophiles must do all they can to insure the

attitude that permeates some manufacturers in the computer industry when it comes to customer service does not become accepted in the production industry.

What does it mean for MII?

Empowering the masses to work with video on computers can only mean more video production applications will evolve. So will the demand for better quality at a reasonable cost. That's where MII shines. From acquisition to tape interface applications in non-linear systems, MII remains in demand. In fact, a whole new realm of user who never was exposed to the industry wide Sony-only-baloney is discovering the MII format.....nearly 10 years into the format's life cycle. Perhaps MII videophiles have lost the battle.... and won the war. Thank-you for your continued support.

Truly yours,



David R. Gardy  
Executive Director  
and Videophile

# The Association needs your 1994-1995 membership dues!!!!

*This form and a \$25.00 fee are required to continue membership in the association and receive this monthly newsletter. Please don't hesitate. (Thanks to the many who have already sent in their membership fees!)* We have tried to make this form as simple as possible. Please take the time to fill it out now. We would appreciate it if you would take a few extra minutes to provide the information in the "optional" section so that we may better serve the association. This form and your \$25.00 dues must be returned *immediately*. *Make checks payable to the MII Users Association of America. Return to: MII Users Association of America, c/o Gardy-*

## Membership Registration Form

Date: \_\_\_\_\_ Renewal: \_\_\_\_\_ New Member: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Company Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Type of Business/Services: \_\_\_\_\_

### **Optional:**

How did you hear about the association? \_\_\_\_\_

Check all that apply: Duplication facility (List additional formats below) \_\_\_\_\_ MII Rental Facility \_\_\_\_\_

MIU User \_\_\_\_\_ MII Owner \_\_\_\_\_ MII Dealer \_\_\_\_\_ MII Repair Center \_\_\_\_\_ Other \_\_\_\_\_

If you own MII, how long have you had it? \_\_\_\_\_

What model numbers? \_\_\_\_\_

If you do not own MII, are you planning to get it? \_\_\_\_\_

Additional Comments/Equipment: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Check number: \_\_\_\_\_ Name on Check: \_\_\_\_\_ Date: \_\_\_\_\_

Check or Credit Card (VISA or MC only) Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_ Authorized Signature: \_\_\_\_\_

***Dues cover the period from Sept. 1, 1994 through Sept. 1, 1995. Below is for office use only.***

Received: \_\_\_\_\_ Membership List: \_\_\_\_\_ Mailing List: \_\_\_\_\_



## Duplication Bay #2, American Magnetic Media Denver, Colorado

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>* <b>Quality duplications</b></li> <li>* <b>Stereo Hi-Fi</b></li> <li>* <b>Custom packaging</b></li> <li>* <b>Order capture</b></li> <li>* <b>24 hour turnaround</b></li> </ul> | <ul style="list-style-type: none"> <li>* <b>Competitive pricing</b></li> <li>* <b>PME distribution</b></li> <li>* <b>Foreign conversions</b></li> <li>* <b>Fulfillment</b></li> <li>* <b>Freight free</b><br/>(on qualifying orders)</li> </ul> |
|--|---|

When you believe you deserve the **best in quality, service, and price**, there's one company just a phone call away.

**1-800-USA-TAPE**  
**American Magnetic Media**  
 5580 Havana St. #6A  
 Denver, CO 80239

\* Special discount available for all MII user members. Dial extension #3 for details.

# MII Users Association of America

## Press Release Form

Requested by \_\_\_\_\_ Point of Contact \_\_\_\_\_

Company \_\_\_\_\_ Phone Number \_\_\_\_\_

Name of Production \_\_\_\_\_ Date of Production \_\_\_\_\_

Client \_\_\_\_\_ Production Company \_\_\_\_\_

Producer \_\_\_\_\_ Director \_\_\_\_\_

Talent \_\_\_\_\_ Subject of Production \_\_\_\_\_

Other Crew \_\_\_\_\_ Format(s) Used \_\_\_\_\_

Special Points of Interest (Attach additional pages if necessary.)

---

---

---

---

---

---

---

---

---

---

---

---

Send to: MII Users Association of America, c/o Gardy-McGrath Int'l, Inc., 1950 Roland Clarke Place, Suite 100, Reston, VA 22091 or fax to (703) 620-0451.

*It is not necessary to use this form, as long as your submission is legible. If you have photos, you may send them too. They will not be returned.*

### For Association Use Only

Date Received

---

Action Taken (where sent and when)

---

---



# **TECHNICAL MAINTENANCE SERVICE CENTER**

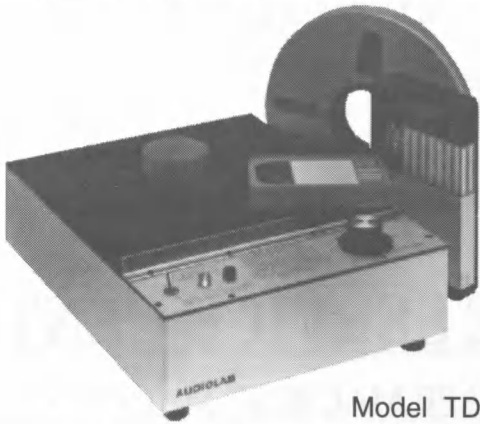
THE EASY AND ECONOMICAL METHOD OF TAPE MACHINE MAINTENANCE

- ★ **SERVICING M-II & D-3**
- ★ **AUTHORIZED PANASONIC REPAIR CENTER**
- ★ **YEARLY MAINTENANCE CONTRACTS**
  - ALL PARTS INCLUDED
  - THREE DAY TURNAROUND OR LOANER PROVIDED
  - RETURN FREIGHT PAID
  - EQUIPMENT HISTORY REPORTS
- ★ **NON-CONTRACTUAL MAINTENANCE**
  - HOURLY RATE
  - SHORT TURNAROUND TIME
- ★ **MANUFACTURERS WARRANTY WORK**

Call Larry S. Jefferson  
(703) 739-5204



## MII Tape Degausser



Model TD-5

**ERASES ALL TAPE FORMATS INCLUDING:**  
**MII - BETA SP - D2 - 1" Reels**

**Only \$1,695**

**AUDIOLAB ELECTRONICS, INC.**

5831 Rosebud Lane, Bldg. C  
 Sacramento, CA 95841  
 Fax: 916-348-1512

**1-800-624-1903**

## SANDWICH ADAPTER

*Your Betacam and your  
 MII Recorder are ONE UNIT  
 with the Telemetrics TM8615*



The **Telemetrics TM8615** is an electrical and mechanical adapter designed to dock an MII recorder to a Beta format camera. All interface functions are **transparent** to the camera and recorder operation.

For further information about the **TM8615** and other high quality, fieldworthy camera control products, please contact:

**Telemetrics**

6 LEIGHTON PLACE, MAHWAH, NJ 07430 USA  
 Tel. (201) 848-9818 • Fax (201) 848-9819

## MII Rental Facilities

*Contact the association if you  
 would like your company  
 added to this listing.*

**Alpha Video** Edina, MN  
 (612) 896-9898  
 Complete MII Edit Facilities

**AudioVisual Headquarters**  
 Rancho Dominguez, CA  
 (310) 885-4200 Rent out 3-  
 AU-65's, they have shipping  
 cases.

**Avon Productions S.**  
 Plainfield, NJ (908) 756-0643  
 Studio & Field MII, Cameras,  
 etc.

**Avonix** Brookfield, WI  
 800-222-6050  
 Full line of MII available

**Broadcast Video Products**  
 480 Main St Armonk, NY  
 (914) 273-6649, Jack Miller

**Communications Televideo  
 Ltd.**  
 (CTL) Silver Spring, MD  
 (301) 585-6311 AU-65, D-3  
 AJD350 Editor, D-3 AJD310  
 Camcorder

**Cinequipt** St Paul, MN

(612) 646-1780 Full line of MII  
 available

**Davis Audio Visual Inc** Denver, CO  
 (303) 455-1122

**ECI Video** Dallas, TX  
 800-880-9400  
 AU-63H, AU-65H, WV F700 cam  
 /AU-410 dockable

**Metrovics, Inc.** Los Alamitos, CA  
 (310) 430-3509 Full line of MII  
 available

**Professional Desktop Video Systems**  
 Glendale, CA  
 800-862-7820  
 Camcorder WV-F700/AU 410

**Pro Line Video** Austin, TX  
 (512) 837-2000 x30  
 Full line of MII available

**Russell Video Svs. Inc.** Ann Arbor,  
 MI  
 (313) 677-4400  
 Bob Russell

**Video Management Systems**  
 Indianapolis, IN  
 (317) 639-6163 Sony M7 Cam., AU  
 500 Portable MII Deck

**Video Replay** Chicago, IL  
 (312) 467-0425 AU-66H

**Vidicom Distributors**

Houston, TX  
 (713) 694-6400

**WGVU/WGVK-TV**  
 Grand Rapids, MI  
 (616) 771-6666, TDD 800-748-  
 0488 AU-650, AU-500, AU-400

*Canadian Rentals:*

**Edcom Multimedia**  
 Kitchener, Ontario  
 N2B 2E1  
 (519) 578-2260 WV-F500/AU/-  
 45H, AU-W35H

**Instructor Aids**  
 Halifax, Nova Scotia  
 (902) 468-2226 WV-  
 F250/AU45H, AU-W35H

**Inter-cite Video** Montreal,  
 Quebec  
 (514) 342-4545  
 WV-F700/AU-410's, WV-F7000,  
 AU-520S, WV-F500/AU-45H,  
 AU-63H,(2) AU-65H,(1) AU-  
 W33H,(1)AU-W35H.

**Smith Sound Productions**  
 Charlottetown, P.E.I.  
 (902) 386-2212 WV-F500/AU-  
 45H, Full A/B Roll Edit Suite

**VidCom** Vancouver, B.C.  
 (604) 732-9711 WV-  
 F250/AU400 Camcorder, AU-63,  
 AU-65, AU-550□



- ✓ Expert repair and personal attention
- ✓ Broadcast, Professional, Industrial
- ✓ VHS/Beta, 3/4", MII, Betacam
- ✓ Serving clients throughout the U.S.A. since 1982
- ✓ Panasonic, Sony, Mitsubishi, JVC, Hitachi and others
- ✓ VCRs, Cameras, Camcorders, Monitors, Controllers

**Factory trained  
and authorized!**

**We'll make sure you're  
sure of your equipment**

Ask about our  
**Preventive  
Maintenance  
Programs**

*Call us with questions about your equipment or our services*

**Video Systems Service Center**  
23322 Peralta, # 3, Laguna Hills, CA 92653

**(714) 855-1082**

## **Flex Service Support from Panasonic**

*A Flexible Program which offers you  
choices to balance your service needs*

**Call Panasonic MII Support at 1-800-742-6530  
for more information**

# **MII REPAIR**

## **FASTER, EASIER, BETTER!**

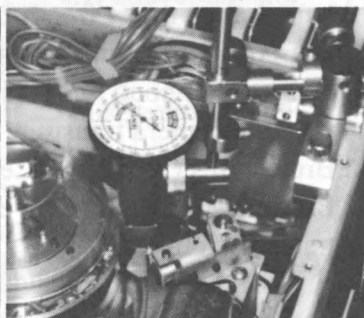
If YOU aren't using TENTEL test equipment yet, you're in for a PLEASANT SURPRISE!  
Four different, unique test instruments to help do repairs BETTER than ANY other methods!

**Tape Tension Gauge**  
**T2-H5-SLCB \$575**

**HEAD Protrusion  
Eccentricity Gauge**  
**HPG-1/S2 \$870**

**Multi-Function  
Reference Plane**  
**TSH-MII \$545**

**Dial Torque Gauge**  
**TQ-600 \$295**



**SPECIAL MII PACKAGE PRICE! \$2285 LIST FOR \$1995: SAVE \$290**

TECHNICAL AND ORDERING INFORMATION CALL TOLL FREE (800) 538-6894

**TENTEL® CORP.**

4475 GOLDEN FOOTHILL PKWY.  
EL DORADO HILLS, CA 95762

(916) 939-4005  
(916) 939-4114 FAX

# PANASONIC

## "TRAFFICCAM" CAPTURES TRAFFIC JAMS FOR SHADOW BROADCAST SERVICES

### *Panasonic Cameras To Help Unsnarl Drive Time*

**Secaucus, NJ (July 1995)** -- Construction on the Gowanus. Bottleneck on the Belt. Cars ground to a halt on Route 3. Ah, the perils and joys of being a New York City commuter.

For the past fifteen years, Shadow Traffic has been easing the rush-hour anxieties of drivers in the Tri-State (New York, New Jersey, Connecticut) area. Shadow Traffic, the New York metropolitan area's largest traffic tracking service, is part of Shadow Broadcast Services (Rutherford, NJ), which provides localized information reports covering news, weather, sports and traffic to radio and television. For instance, Shadow Traffic services 65 metro-area radio and television stations (including WNBC-TV and WCBS-TV) with traffic and transit data.

Now, through a collaboration with Panasonic, Shadow Traffic is enlisting "TrafficCam" broadcast and surveillance cameras to provide live video coverage of up to 75 Tri-State travellers' nemeses, including the approaches to the Lincoln Tunnel and George Washington Bridge, Exit 14 on the New Jersey Turnpike, the Long Island Expressway, the Gowanus Expressway, the Belt Parkway, and the West Side Highway.

According to Shadow's President Rich Homberg, "TrafficCam is definitely the most innovative way to cover traffic. It is the only true source of real-time, round-the-clock surveillance.

The first TrafficCam was installed last year atop the Panasonic Palmcorder billboard located in Weehawken, NJ on the approach to the Lincoln Tunnel: the camera monitors traffic flow both at the Tunnel and on Manhattan's West Side. The WV-E550 3-CCD DSP camera, from Panasonic Broadcast & Television Systems Company, is mounted more than 200 feet above the ground, on Panasonic's billboard adjacent to the I495 Lincoln Tunnel Feeder Artery. (The Port Authority estimates that more than 116,000 vehicles travel through the Tunnel every day.)

Ideal for broadcast point-of-view applications, the WV-E550 offers excellent picture quality, consistent and reliable performance, centralized control and user-setting memorization and control. It features three 4000,000 pixel, 1/2-inch high-density, high-sensitivity Interline Transfer (IT) CCDs and achieves 800 lines of horizontal resolution at S/N greater than 62dB with f8 at 2000 lux.

The TrafficCam is enclosed in a weatherproof housing equipped with a heater, fan, defroster, sun shield and window wiper unit. It is able to withstand New York's harshest summer and winter weather conditions, including a temperature range from -22 degrees F to +113 degrees F. Currently transmitting over standard dial-up telephone lines using AT&T's Picasso unit, the camera transmits live images to Shadow Broadcast's Operations Center. Shadow Broadcast will soon convert to microwave transmission.

Homberg explained that Shadow approached Panasonic because of the company's past, positive experience working with Panasonic because of the Company's past, positive experience working with Panasonic equipment,

and because of the landmark Palmcorder billboard. He reported that, since installed, TrafficCam has performed beautifully during extremes of heat, as well as easily withstanding rainy and cold conditions.

Homberg added that with TrafficCam, Shadow has been able to monitor traffic and new events (fires, injury accidents, for example) when competitors' aircraft had been banned from the scene.

Over the next several months, Shadow Broadcast Services intends to expand its TrafficCam program to include broadcast and cable television stations across the New York Metro area. Also, Shadow plans to install TrafficCams in up to eight additional markets this year, including Philadelphia (completed), San Francisco, Los Angeles, Washington, and Chicago.

### **PANASONIC DEBUTS VHS HI FI VCR WITH JOG/SHUTTLE DIAL**

**Secaucus, NJ (August 1995)** -- Panasonic Broadcast & Television Systems Company (PBTSC) has announced the AG-2540, a VHS Hi-Fi VCR that delivers superb picture quality in all playback modes and with all special effects. With a one piece aluminum die-cast chassis (the industry standard for withstanding harsh environmental conditions such as high temperatures and sudden humidity changes), the AG-2540 is ideal for such applications as point-of-information, point-of-display, education, and training.

The AG-2540's Super Drive System is characterized by an advanced mechanism that works quickly, quietly, and handles tapes gently. The VCR also offers exemplary operating convenience, with an illuminated operating indicator and large digital display, super jog, and shuttle for 19-step control over playback speed, and Quick View during FF or REW. S-VHS Quasi-Playback facilitates playback of S-VHS tapes at standard VHS resolution.

The AG-2540 incorporates a High-Frequency Head with Auto Head Cleaning. The VCR has

two Hi-Fi audio tracks, resulting in high-quality audio recording, with a frequency response of 20 Hz - 20kHz and a dynamic range of more than 90 dB.

The AG-2540 has a three-pronged UL/CSA-approved AC plug suitable for industrial use. The unit offers End-of-Video Auto Repeat for kiosk applications, and has on-screen display in English, Spanish, Portuguese, and French.

Additional features include a real-time tape counter display, front A/V jacks, LCD Remote Control, Super 4 Head Video System, 181-channel tuning, one-touch index search, digital auto tracking, 2-way cue and review, repeat playback, skip search and tape remaining indicator.

The AG-2540 is available at the end of this month at a suggested list price of \$499.

### **HOFFMAN APPOINTED DISPLAY PRODUCTS MARKETING MANAGER**

**Secaucus, NJ (August 1995)** -- Clint Hoffman has joined Panasonic Broadcast & Television Systems Company as product marketing manager for display products. His products marketing responsibilities range from broadcast and industrial monitors to CRT and LCD projectors.

Most recently, Hoffman served as the sales & marketing manager for Mitsubishi Electronics' display products, and was with that company in management positions in product development and operations for nine successful years.

Hoffman holds a B.A. in Communications from William Paterson College in Paterson, N.J., and resides in Wall, New Jersey.

**PLEASANTVILLE, NY VIDEO  
COMPANY RECEIVES LOCAL  
AWARDS  
AND NATIONAL ATTENTION**

"**THE CREATORS**", a video production in Pleasantville, NY recently won awards from two prestigious Westchester organizations for outstanding work.

The **Advertising Club of Westchester** honored "**THE CREATORS**" at their annual awards banquet with an award for a video which documented a project to help senior citizens through planned visits to nursing homes by local middle school students. This video, mastered on **MII** was distributed and seen by middle school principles throughout the area successfully expanding involvement and student volunteer participation to many schools.

The **Westchester/Mid-Hudson Videographers Association**, an area organization of professional videographers with a national affiliation, also honored "**THE CREATORS**" with three of their top five awards which included first place. One of the videos appeared on national TV. It helped a local inventor sell her product.

Other productions include a video that landed the producer on CNN discussing his family oriented safety tape. "**THE CREATORS**" also produced a long list of high quality fund raising videos for non-profit organizations which attracted attention in national print media. Even though clients have included IBM and NYNEX, they have produced videos for other local establishments large and small.

Richard DePaso, president of "**THE CREATORS**" says his mission is to produce high quality affordable videos in Westchester allowing clients to avoid the overhead and time associated with travelling to NYC. He also indicates that soon they will be producing multi-media programs on CD-ROM.

When speaking of their success formula, Bob Detmer, a member of the team who writes,

produces and directs quotes Shakespeare saying, "The play's the the thing", meaning that writing and editing are key elements to any well produced video.

Mr. DePaso offers that he would be happy to spend the time and give free advice to anyone who wants to know how a video is produced and how it could help meet their objectives.

"**THE CREATORS**" is located in Pleasantville, NY. The number to call for free information is (914) 769-0676.

**LARRY O. DEAN  
ON THE VALUE OF MII  
*Owner of R-VCR Finds More Benefits***

As a videographer, I was very relieved that my oldest son chose a respectable career in music. This spring he performed his senior recital on french horn. His proud grandmother took me to witness the event at Tabor College in Hillsboro, Kansas. Travelling by AMTRAK meant taking a very light load: camera, deck, batteries, tape, period.

Now these days, all music have its video, which brings us to the unique advantages of MII. Tabor College made an R-DAT original recording, transferred to cassette for their archive, so I would have an excellent audio master. KVCR FM at San Bernardino Valley College is a pioneer in the utilization of digital audio and they were able to transfer the R-DAT onto 2 track open reel. Remember the company that makes the world's best digital videotape recorder good for hundreds of perfect replications? Well, it seems that they were unable to make a professional audio recorder capable of running a consistent speed as the reel filled. Conforming video to match audio is always a challenge, having the audio source speed continually change course makes it especially difficult. But the MII AU63 auto tracking video playback is easily adjusted to 1 per cent speed increments, adequate for matching

the short pieces with one setting. For the two 16 minute concerto pieces, the AU63 speed was adjusted on the fly to keep pace.

While the manual states that it is necessary to hold the button continually to make the speed override, there is a simple work around. Set up the tape speed override on the AU63 from an external panel, such as the AU65 from an external panel, such as the AU65, then switch the AU63 in local control or externally disconnect the 9-pin to hold the settings.

**GARDY McGRATH PRODUCES  
FIFTH IN SERIES OF FASTSHIP  
VIDEOS FOR EXHIBITION AT  
SNAME '95**

Gardy McGrath International (GMG), a full-service video production facility headquartered in Reston, VA completed production on the fifth in a series of videos featuring the new FastShip design, a state-of-the-art semi-planning 770 ft. monohull, capable of speeds of up to 40 knots. The most recent effort featured detailed coverage of computer simulation tests from the ship modeling facilities at MIT and modeling tests at the SSPA in Sweden. In each of the FastShip video presentations, Thornycroft, Giles and Company, designer of FastShip, has utilized Gardy McGrath's 3-d animation capability to produce broadcast quality computer graphic video scenarios that demonstrate the unique capabilities of FastShip, a vessel which has generated extensive interest in the maritime industry. All of the FastShip video presentations will be on display during the Society of Naval Architects and Marine Engineers' International Maritime Exhibition (Oct. 4-6, 1995 in Washington, DC) at the Gardy McGrath booth (no.613).

**GARDY McGRATH COVERS  
AFSA AWARD PRESENTATION  
TO CONGRESSMAN  
JIM MORAN**

Gardy McGrath International (GMG) recently produced a piece featuring an award presentation to U.S. Congressman Jim Moran (D-VA). The Mendel Rivers Award, annually bestowed by the Air Force Sergeants Association, is granted to the legislator who best displays the dedication in serving the needs that are most important to the enlisted personnel of the U.S. Air Force.

The event was captured in GMG's 40'x40' television studio, one of the largest such facilities in the mid-Atlantic. Congressman Moran, unable to attend the AFSA annual conference, also delivered a twenty minute legislative update notifying AFSA members of important issues they face on Capitol Hill.

The presentation was similar in purpose to a video GMG produced earlier in the month for the Republic of China Embassy. GMG recorded over 30 congressman and senators extending their welcome by video to the visiting Taiwanese President, who, unable to come to Washington, viewed the video during a visit to his alma mater, Cornell University.

Gardy McGrath International, which has specialized in the production of video presentations on government-related subjects since 1985, has grown to become the largest full-service television and video production facility in the mid-Atlantic.

# **PANASONIC MII TRAINING VIDEOS**

## **NOW AVAILABLE!!!!**

This set of three 30 minute videos feature preventive maintenance, troubleshooting, applications overview, upper drum replacement, and basic service procedures. Specifically, items covered include the following:

### **(I.) PANASONIC MII EQUIPMENT TRAINING-LESSON I**

#### **RECOMMENDED CLEANING AND MAINTENANCE PROCEDURE**

##### **Sections-**

- 1.0 - Upper Drum
- 2.0 - AC Head Stack
- 3.0 - Field Cleaning the Portable Unit
- 4.0 - Tape Path
- 5.0 - Cleaning the Pinch Roller
- 6.0 - Cleaning the Capstan
- 7.0 - Cleaning the Posts
- 8.0 - Cleaning the Fixed Posts
- 9.0 - Brush Assembly
- 10.0 - Cleaning the Earthing Assembly
- 11.0 - Final Disassembly and Cleaning
- 12.0 - Emergency Tape Unloading Procedures
- (+ Conclusion)

### **(III.) LESSON 3 APPLICATIONS AND OVERVIEW** (Including basic troubleshooting)

##### **Sections-**

- 1.0 - Introduction
- 2.0 - Stand Alone Single Machine Configuration
- 3.0 - Machine to Machine (cuts only applications)
- 4.0 - A/B Roll Editing Systems
- 5.0 - MII Menu and Setting Instruction

### **(II.) LESSON 2 UPPER DRUM REPLACEMENT AND ELECTRICAL ALIGNMENT**

##### **Sections-**

- 1.0 - Cleaner Roller Removal
- 2.0 - Mounting of Fixing Plate for Tip Protrusion Gauge
- 3.0 - Video Head Tip Protrusion for Measurement
- 4.0 - Removal of Upper Drum Assembly
- 5.0 - Upper Drum Re-assembly
- 6.0 - Eccentricity Gauge Adjustment
- 7.0 - Simplified At "x" Valve Adjustment



**All three presentations in VHS \$100.00 plus shipping (\$13.95 for ground UPS)  
Checks/Mastercard/VISA accepted**

**ALL PROCEEDS BENEFIT USER ASSOCIATION ACTIVITIES.  
IF YOU HAVE ANY QUESTIONS ABOUT THE TAPES PLEASE  
CALL THE USERS ASSOCIATION AT 1(800)966-1030,  
1(703)620-6000, OR FAX YOUR REQUEST AT 1(703)620-0451  
24 HOUR FAX LINE**

**(Virginia residents must add 4.5% sales tax to all orders.)**

# Authorized Panasonic Dealers/Repair Centers

*The following is a current list of authorized Panasonic Dealers Who have sponsored the MII Users Association with contributions of \$250.00 We appreciate their support and urge all users to support them in return!*

## Northeastern

Advanced Video Systems  
19 Roots Lane  
Owego, NY 13827  
(607) 687-0545

Alleghney Electronics, Inc.  
800 Chestnut Ave.  
Altoona, PA 16601  
(814) 946-0871

Colortone Camera, Inc.  
76 S. Central Ave., Rte. 9A  
Eimsford, NY 10523  
(914) 592-4151

Communications Televideo  
9301 Georgia Ave.  
Silver Spring, MD 20910  
(301) 585-6311

Crimson Camera Tech Sales  
325 Vassar St.  
Cambridge, MA 02139  
(617) 868-5150

DSI Video Systems, Inc.  
627 Boulevard  
Kenilworth, NJ 07033  
(908) 245-4833

Eastern Video Systems, Inc.  
2 Sterling Rd.  
Billerica, MA 01862  
(508) 667-0009

High Fidelity House, Inc.  
1001 Sussex Blvd.  
Broomall, PA 19008  
(215) 544-4420

Washinton Professional  
Systems, Inc.  
11242 Grandview Ave.  
Wheaton, MD 20002  
(301) 942-6800

Quail Video Productions  
924 Penn Ave.  
Pittsburgh, PA 15221  
(412) 243-1300

R.P.C. Video, Inc.  
384 Route 909  
Verona, PA 15147  
(412) 243-1300

Seneca Communications Inc.  
1321 Dunbar Ave.  
Dunbar, WV 25064  
(304) 766-8740

Specialized  
Communications  
907 Maryland Ave.  
Hagerstown, MD 21740  
(301) 790-0103

Tri-State Video Services,  
Inc.  
1379 Pittsburgh Rd.  
Valencia, PA 16059  
(412) 878-1630

Videoplay Industries, Inc.  
RT30 Tolland Ind. Park  
Tolland, CT 06084  
(203) 872-9195

## Midwest

Alpha Video & Audio, Inc.  
7711 Computer Ave  
Edina, MN 55435  
(612) 896-9898

Avonix Video Ayatems,  
Inc.  
3495 N 124th St.  
Brookfield, WI 53005  
(414) 783-6050

B&J Photo, Inc.  
525 North Main St.  
Findley, OH 45040  
(419) 424-0903

Beatty TeleVisual, Inc.  
1287 Wabash Ave.  
Springfield, IL 62704  
(217) 787-4855

Communications System  
Group  
13355 Capitol Ave.  
Oak Park, MI 48237  
(810) 399-2000

Full Compass Systems, Inc.  
5618 Odana Rd.  
Madison, WI 53719  
(608) 271-1100

Industrial Broadcast  
Services  
5436 W. Mingo, Suite F  
Tulsa, OK 74146  
(918) 663-5126

Industrial Video, Inc.  
1601 N. Ridge Rd.  
Lorain, OH 44055  
(216) 277-1218

Klaus Radio, Inc.  
8400 N. Allen Rd.  
Peoria, IL 61615  
(309) 691-4840

Lines Music Company  
219 S. Jefferson  
Springfield, MO 65806  
(417) 862-5533

Modern Communications, Inc.  
1733 Larkin WMS Rd.  
St. Louis, MO 63126  
(314) 343-0800

Pratt Audio Visual/Video  
Corp.  
200 Third Ave., SW  
Cedar Rapids, IA 52404  
(319) 363-8144

Professional Video Supply  
9300 W. 87th Terrace  
Overland Park, KS 66212  
(910) 642-5528

Swiderski Electronics  
1200 Greenleaf Ave.  
Elk Grove Village, IL 60007  
(708) 364-1900

TV & Video Service (KEY)  
14121 "S" St.  
Omaha, NE 68137  
(402) 895-3100

Thalner Electronics Labs, Inc.  
7235 Jackson Rd.  
Ann Arbor, MI 48103  
(313) 761-4506

Todd Communications  
6545 Cecilia Circle  
Minneapolis, MN 55435  
(612) 941-0556

## West

Accent Audio-Video  
13616 Neutron Rd.  
Dallas, TX 75244  
(214) 458-0501

Audio Visual Supply, Inc.  
4575 Ruffner St.  
San Diego, CA 92111  
(619) 565-1101

E.C.I Video  
2809 Ross Ave.  
Dallas, TX 75201  
(214) 969-6946

Electronic Design &  
Service  
6922 San Fernando Rd.  
Glendale, CA 91201  
(818) 843-6199

Industrial Broadcast  
Services  
5436 W. Mingo, Suite F  
Tulsa, OK 74146  
(918) 663-5126

IVS  
7925 Auburn Blvd.  
Citrus Heights, CA 95610  
(916) 725-6600

Lubbock Audio Visual  
Co., Inc.  
2120 Avenue Q  
Lubbock, TX 79411  
(806) 744-2559

Metrovionics, Inc.  
3808 Catlina Ct.  
Los Alamitos, CA 90720  
(714) 827-4580

PCI, Inc.  
1595 West Amador, Suite  
H  
Las Cruces, NM 88005  
(505) 523-7788

Professional Video &  
Tape, Inc.  
10240 SW Nimbus, Suite  
L11  
Tigard, OR 97223  
(800) 833-4801

Studio Spectrum, Inc.  
1056 N. Lake St.  
Burbank, CA 91502  
(808) 843-1610

Troxwell Communications  
4030 South 38th St.  
Phoenix, AZ 85040  
(602) 437-7240

Tulsa Electronic Systems,  
Inc.  
4727A So. Memorial  
Tulsa, OK 74145  
1-800-322-9220



1-800-322-9220

TV Specialists, Inc./Video  
180 East 2100 South, Suite 104  
Salt Lake City, UT 84115  
(801) 486-7555

Video Store, Inc.  
2601 McHale Ct. #140  
Austin, TX 78758  
(512) 837-2000

Video Systems Service Center  
23322 Peralata, # 3  
Laguna Hills, CA 92653  
(714) 855-1082  
(Repair Only)

Video Technical Services, Inc.  
222 Truman NC  
Albuquerque, NM 87108  
(505) 265-4045

Vidicomp Distributors Inc.  
232 W. 38th St.  
Houston, TX 77018  
(713) 694-6400

Waterford Group (The)  
307 Orchard City Dr. Ste. 102  
Campbell, CA 95008  
(408) 374-8550

#### **Southern**

Allied Communications Corp.  
1650 Elm Hill Pike, Suite 1  
Nashville, TN 37210  
(615) 391-5500

AVEC Electronic Corporation  
2002 Staples Mill Rd.  
Richmond, VA 23230  
(804) 359-6071

Custom Supply, Inc.  
2509 5th Ave. South  
Birmingham, AL 35233  
(205) 252-0141

Delta Electronics  
dba Delta Media Systems  
1406 Terry Rd.  
Jackson, MS 39204  
(601) 969-2929

Electric Image Media Systems  
3409 NW 9th Ave. Ste 1104  
Ft. Lauderdale, FL 33309  
(800) 422-9323  
(305) 537-9323

Florida Video Systems  
14422 NW 7th Ave.  
Miami, FL 33168  
(305) 688-6618

Galjour Electronics Corp.  
dba Crescent  
2744 Marietta St., Suite 2

Kenner, LA 70062  
(504) 466-4454

Gendra Broadcasting Corp.  
2800 Biscayne Blvd., Suite 700  
Miami, FL 33137  
(305) 372-8845

H. B. Centennial  
2500 NW 39th St.  
Miami, FL 33142  
(305) 633-2200

Long Communications Group, Inc.  
96 Burke St.  
Winston-Salem, NC 27101  
(919) 725-2306

Mission Service Supply  
Drawer 2957  
900 Wood St.  
W. Monroe, LA 71294  
(318) 325-8674

Professional Communication Systems  
5426 Beaumont Center Blvd. #35  
Tampa, FL 33634  
(813) 888-5353

Showcase Inc.  
2323 Cheshire Bridge Rd. NE  
Atlanta, GA 30324  
(404) 325-7676

Sports-Tech International, Inc.  
6300 N.W. 5th Way, Ste 150  
Ft. Lauderdale, FL 33309  
(305) 772-9155

Technical Video Systems, Inc.  
215 N. Broad St.  
Winston-Salem, NC 27101  
(910) 748-0916

Total Audio Visual Services  
811 Marietta St.  
Atlanta, GA 30318  
(404) 975-7555

Video Production Systems, Inc.  
8875 N.W. 23rd St.  
Miami, FL 33172  
(800) 666-1699

W.H. Platts Co.  
234 Meacham St.  
Charlotte, NC 28203  
(704) 332-9053

Whitlock Computer Co.  
4120 Cox Rd.  
Glen Allen, VA 23060  
(800) 745-9201

## ***Have you returned your membership registration form and \$25.00 dues?***

If you have not, please do so immediately!!! *Make checks payable to the MII Users Association of America.* Return form (found on page 2 of this newsletter) and payment to:

MII Users Association of America  
c/o Gardy-McGrath (Int'l), Inc.  
1950 Roland Clarke Place, Suite 100  
Reston, VA 20091  
(703) 620-6000 or 1- 800-966-1030  
Fax: (703) 620-0451 ☐

## **MII Job Shop**

Electronics Technician, Experienced and entry level positions available. AA in Electronics required. Work on Broadcast MII video tape machines and camera. Some transmitter work. Drug screen required. WHAG-TV is a small market NBC affiliate. We offer a comprehensive benefit package, including 401K and section 125 plans. Send resume and salary requirements to personnel, WHAG-TV, Dept. M, 13 East Washington Street, Hagerstown, MD 21740. No phone calls. EOE.

Send resumes and sample tapes to the Association. Please state which position you are interested in.

*All responses will be kept in strictest confidence.* ☐

## MII Duplication Facilities

If you are a duplicator and you are an MII User, the Association needs to know about it.

*Currently our list includes:*

### Action Duplication

Conshocken, PA 1(800) VHS-DUBS  
**Action Video Productions**  
Greenville, SC  
(803) 297-8865

**Alpha Video & Audio, Inc.**  
Edina, MN (612) 896-9898

**American Production Services**  
Seattle, WA (206) 282-1776

**Advanced Audio Video** Denver, CO  
800-368-0406

**American Magnetic Media**  
Denver, CO  
800-USA-TAPE

**AME** N. Hollywood, CA  
800-336-3827

**Avon Productions**  
South Plainfield, NJ  
(908) 756-0643

**Bennu Productions** New York, NY  
(212) 213-8511, Wayne Keeley

**Broadcast Video Products**  
480 Main St Armonk, NY  
(914) 273-6649, Jack Miller

**Cassette Dub Inc.** Northvale, NJ  
(201) 767-7077

**CenterCom, Inc.**  
Milwaukee, WI (414) 353-2001  
Lincolnwood, IL (708) 675-1411  
Tampa, FL (813) 886-8266

**Commercial Video**  
101 Winston St.,  
Cumberland, MD 21502  
(301) 724-2799, ask for Greg.

**Commonwealth Films**  
Richmond, VA (804) 649-8611

**Copymaster Video** Villa Park, IL  
(708) 279-1276

**Cinequipt** St Paul, MN  
(612) 646-1780

**Creative Visual** 10135 J St.,  
Omaha, NE 68127  
800-547-4184, ask for Larry.

**Curtis Inc.** Charlotte, NC  
800-733-2878

**Curtis Inc.** Cincinnati, OH 45202  
800-733-2878

**ECI** Dallas, TX  
800-880-9400

**Elite Video Production**  
Brooklyn, NY (718) 627-0499

**Global Vision** Reisterstown, MD  
(301) 356-6715

**Group Video Productions**  
Sacramento, CA  
1-800-748-4982

**HAVE, Inc.** Hudson, NY  
(518) 828-2000

**Industrial Audio Video**  
Houston, TX  
(713) 535-2375

**Industrial Communications**  
Birmingham, AL  
(205) 942-0132

**International Video Center**  
2528 Edgehill Rd  
Cleveland Heights, OH 44106  
(216) 321-1440

**Juntunen Video** Minneapolis, MN  
(612) 341-3348, Mike Vinup

**MagneTech** Ft. Lauderdale, FL  
800-683-DUPE

**Majestic Video** Burbank, CA  
(818) 843-1806, Cliff Sawyer

**Master Images Video Duplication,**  
Inc. Wheeling, IL  
(708) 541-4440

**Media Concepts** St. Petersburg, FL  
(813) 321-2122, 800-330-3873

**Multi-Magnetics** Denver, CO  
(303) 825-7768

**Network Video Services**  
Alexandria, VA  
800-289-DUBS (3827)

**Park Avenue Productions**  
Richmond, VA  
(804) 346-3232

**Preston Trucking** Preston, MD  
(410) 673-2930

**Pro Line Video** Austin, TX  
(512) 837-2000 x30

**Quinn Productions**  
Winston-Salem, NC  
(919) 768-2746

**Sign Media, Inc.** Burtonsville, MD  
(301) 421-0268

**Shooby-Dooby Duping** Orange, CA  
(714) 744-4041, Terrence West

**Televent Video Services**  
Oak Park, IL  
(708) 383-5588

**Tri-State Video**, Valencia, PA  
(415) 898-1630, Jim Wachtel, Lori Keffalas

**USF&G Corporation**  
Baltimore, MD  
(410) 578-2916, Steve Kuhn

**Vaughn Communications:**  
Minneapolis, MN 800-323-0281  
Creve Coeur, MO (314) 576-6804  
Phoenix, AZ 800-228-7609  
Milwaukee, WI (414) 276-6511  
Tampa, FL 800-252-7564  
New York, NY (212) 447-1038  
Portland, OR 800-772-2251

Atlanta, GA 800-966-0859  
Irvine, CA 800-228-7609

**Video Duplication** Atlanta, GA 800-235-9732

**Video Duplication Services** Columbus, OH 800-289-4301  
Dayton, OH (513) 294-5883  
Cleveland, OH (216) 741-3827  
Youngstown, OH (216) 792-3827  
Detroit (Troy), MI (810)680-9100

**Video Management Systems**  
Indianapolis, IN  
(317) 639-6163

**Video on Location**  
Rockville, MD  
(301) 984-5823

**Videoland** Lacey, WA  
(206) 491-1332

**Video Now** 610 S. Central Ave.  
Kent, WA  
(206) 852-1186

**VideoPlay Industries** Rockville, CT  
(203) 875-5211

**Video Proofs** Rohnert Park, CA  
(707) 586-0383

**Video Replay** Chicago, IL  
(312) 467-0425

**Video Techniques, Inc.,** Bradenton, FL  
(813) 746-4949

**Video Transfer** Rockville, MD (301) 881-0270

**Vidicomp Distributors**  
Houston, TX  
(713) 694-6400

**VIP Duplication** 2908 Cameron St.,  
Suite-B, Monroe, LA 71201  
(318) 322-8222, Phillip Nelson

**VU Video** Denver, CO  
800-637-4336, Eric Wheeler  
**Wilderness Productions**  
S. Lake Tahoe, CA  
800-874-7488, in CA (916) 577-3008

**WGVU/WGVK-TV**  
Grand Rapids, MI  
(616) 771-6666, TDD 800-748-0488

**WPSD-TV** Paducah, KY  
(502) 442-8214, Bob Fesmire

**Your Video Productions**  
Costa Mesa, CA  
(714) 645-9687

*Canadian Duplicators:*

**Agincourt Productions**  
Richmond Hill, Ontario  
(416) 886-8273

**Inter-cite Video** Montreal, Quebec  
(514) 342-4545

**Lynx Video Production** Toronto, ON  
(416) 516-0270, Jim Blake

**Marine Video** 1955 Wylie St.  
Vancouver, B.C. V5Y 3N7

*If your company isn't listed here, please call 1-800-966-1030. □*



# Your Source for MII Video Tape Duplication

## Specializing in the Following Formats

NTSC		PAL, SECAM
MII	VHS	VHS
1"	S-VHS	S-VHS (Playback)
Betacam SP	Betamax	Betamax
Hi 8		Hi 8
3/4" SP		3/4" (lo-band)

- Excellent Quality
- Loop Tapes
- Each Copy Individually Checked
- Fast Service—  
Rush Is Never a Problem

- Competitive Pricing
- Multiple Formats
- Standards Conversion

*Call Travis Franklin, Duplication Operations Manager  
Direct: 713/535-2375*

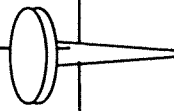
# Industrial Audio/Video, Inc.

2617 Bissonnet, Houston, Texas 77005

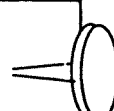
Main: 713-524-1956 • 1-800-392-4384, ext. 375

Direct: 713-535-2375 • Fax: 713-524-2823

Hours: Monday – Friday: 8–5 CST



# MII Trading Post



*Please contact us when the equipment is sold!!!*

## Equipment Wanted

**Wanted: Panasonic AU-500. portable VTR.** State condition and anything which will be helpful about hours used and more. The price asked for? Bill Conduit, Bay Cities Video Group! voice mail: 1(800) 677-1207 touch tone in pin #:1375. orm yway@ix.netcom.com or fax: 1 (510) 482-5584.

**JVC 3/4" Editing System.** Mr. Park at (703) 359-0810.

**Wanted: AU-TB50, AU-66 Studio Deck.** Cash. Call Kevin at (310) 281-7599.

**Wanted: Used MII Tapes.** Any length. Contact Jamie Dotson. (800)842-4273. 1/95

**Wanted: Panasonic MII Camcorder Model WV-F500 and AU 45 Back-Send** cash price and condition. Bob Benson Video Film. (508) 432-1200. 1/95

**Wanted: Panasonic AU-550 Field MII editing VCRs.** Any condition. **Spare Parts Inventory for AU-550, especially printed circuit boards.** Contact Jonathan Meyers at (612) 642 4637. 12/94

**Wanted: PC video card** that will render \*.TGA files at NTSC 720 x 486 resolution or greater. Needs Component or RGB outputs. Call Gary Dansie, Options Inc. (801) 467-7421 11/94.

**Wanted: Amiga 2000/2500.** Need CPU, will consider some extras-cheap. Also want rear-screen fabric or panel, 4'x6' or larger; Panasonic interfaces for IVES II. Contact Steve Braker at (608) 251-8855.

**Wanted: MII player and Sony 5850 recorder.** Call Peter at (818) 888-8673.

**Wanted: Alamar 1055 and SC 2000's,** used or new, Call John Bishop (704) 398-0046.

**Wanted: Amiga Computers & related hardware,** as well as used working prosumet video equipment. Copperhead Technologies. (518) 346-3894.

## Equipment for Sale

**Panasonic F500/8U45 MII Camcorder.** \$10,500. Call Robert D. Legum (301) 340-9566 at Image Solution.

**Grass Valley model 100 switcher, Sony BVE-900 edit controller.** Price is \$8,000.00. Excellent condition. Call Brian Barkley at (913) 681-1080.

**WV-F500 Digital Camera** docked to AU-410 MII recorder. Low hours with 2 Anton Bauer Digital Propac Batteries and charger. Bogen 3066 fluid head tri-pod, \$13,500.00. **Panasonic AU-63H MII PLayer** with dynamic tracking, \$6,500. **Panasonic AU-65 MII Player/Recorder,** \$7,000.00. Package price, \$24K. Jeff Bahde (303) 237-9409.

**Ampex ADO-1-- DVE 3D Option & Upgrade Software,** \$15,000. **O'Conner 50 Fluid Head Tripod w/ spreaders,** \$875.

**JVC KM-2000 Switcher, \$875. Barco Graphics Data Projector,** scans to 70Khz, \$2700. **Adda VW-2 TBC/SYNCH w/genlock, infinite window, & freeze, \$875. RGB Encoder (RGB/s to NTSC), \$200. Ikegami ITC - 350 3 tube saticon w/10:1 servo lens 7 macro, \$500. Keldon Copy Stand, \$195. Owner retiring! Contact Bob Pooler @ (617) 862-2477.**

**AU-4-- MII Field Recorder, \$2500. AU-650 MII Studio Recorder,** slow motion, full editing, built in TBC, \$7500. **AU-660 MII Studio Recorder,** slow motion, full editing, advanced 9 bit TBC, \$9000. All equipment carries a full 90 day warranty. Call (301) 790-0103.

**AU-62H, AU-63, AU-65** all with TC option. Excellent condition. Fully Operational. B/O. Please call Murray at (210) 692-1776.

**Jazz DVE** with Ensemble, harmony effects, extra cards. Excellent condition, \$4,100. **Fortel Y688 TBC** Excellent condition, \$850. Dave Andrews (801) 272-3031.

**ADO 100, \$8,500.** Don Brown Productions, Inc. Don Brown.. (714) 771-9711.

**JVCKR - M20U Editing VCR.** Good Condition, exceptionally. Head in excellent condition. Original Box. \$3,300. For more information contact Louis Asbury at Southern Video Corp, Charlotte, NC. (704) 333-5454.

**Panasonic AU55H MII field recorder/editor.** Practically brand new, less than 75 hours of use. Never left the studio, barely used. Spotless i original box with AUB 110 power supply. Works flawlessly, beautiful picture and sound. \$10,000 make offer, quick cash carries weight. Contact Geltner at Stuart Geltner Media 100 Editing Services, (505) 820-0696.

**Amiga A2000 Computer,** Kickstart 1.3, 1 low density floppy disk drive, 1 meg chip ram, keyboard & mouse. Upgrades available. \$400.00. **Amiga A500 Computer.** New in factory sealed case, Rev. 6.0 motherboard, 8372A 1 Mes Angus, Kickstart 1.3, mouse keyboard, power supply docs/disks. **Amiga A2065 Computer.** Commodore. A2065 Ethernet Networking cards for A2000/3000/4000 Systems. \$189. Call Bill Tucker at (518) 346-3894.

**Portable MII Panasonic AU-520 SP.** Bought B-stock for \$7,500 -- selling for \$5700. Fully tested and in MINT CONDITION!! **Pro-portabrace case, two batteries plus AC/DC converter-recharger** additional \$450. Must sell as unit. Total \$6,150 + shipping. Call Tom Miller at (406) 222-6733.

**AU - 660 Recorder/Player , \$3100. TM-90U Color Monitor** 2 channel w/ multi pin RGB input, \$200. Contact Dan Hall at Video Management Systems. (317) 841-1212

**Panasonic AU650 MII Video Recorder** with slo-mo dynamic tracking, time code, and time

base corrector. Breakout boxes and service manual included. Excellent condition. Used in research lab converting to SVHS system. \$5,000 or best offer. **3 New 90 minute tapes,** \$60 each, 15 used tapes with low passes and factory cases - \$20 each. Contact Wiltz Wagner at (317) 274-1436.

**Magni Monitor.** Both a waveform monitor and a vectorscope for both composite and component. Displays on your monitor. \$1,200.00. **Sony RM 450.** Edit controller in perfect shape. Manual included. \$1,100.00. **Sony DME 450.** Digital video special effects. Works with Sony RM 450 controller. No TBC needed. Service manuals included. \$1850. **Newtek Toaster. Amiga 4000,** 040 board, 430 meg HD, 18 meg ram, Toaster 4.0 software, Nucleus Personal Editor software and hardware, 8 bit sound card, 1960 monitor, ready to drop your Flyer in. \$6,500.00. **Hotronics AE-61.** Nice baseic stand alone TBC. Great for dubbing set-up. \$500.00. Call Mike at 1 (303) 484-5535.

**Everything must go!** (1) **Tektronix TSG-130 Generator;** (1) **Panasonic AU-63 Studio Player with Auto Tracking, TC Reader Generator, 520 drum hours;** (1) **Panasonic AU-62 Studio Player with TC reader/GGenerator, 470 drum hours;** **Panasonic AG-7750 S-VHS Edit Recorder with TC reader/generator;** (1) **Panasonic AG6400 Portable Recorder, @3500 hours;** **Panasonic D5000 Industrial Camera with ENG Kit;** (2) **Panasonic AG-1950 VHS Editing Recorders with AG-A95 Editing Controller;** (d1) **BT-S700N Panasonc Portable Monitor with Portabrace MO8020 case;** (1) **Bogen 3050 Tripod with fluid head;** (1) **Commodore Amiga 2000HD computer with 8 Meg RAM, Mega Chip 200, Broadcast Titler 2, Pro Video Post, Deluxe Paint II Programs, Progressive IMage Super Gen, 1084S Monitor;** (1) **Tascm Porta-One Multi-Track Audio Recorder;** **Tasca, M-106 6 Channel Audio Mixer;** (2) **Panasonic AU-410 Dockable recorders with timecode and docking adapters;** (1) **Panasonic WV-F250H Cameras with Wv-Vt15 MII docking adaptors, WV-VF39 1.5" viewfinder, WV-QT70 tripod adaptor, WV-MC35 electret condenser microphone, Anton Bauer AB-13 battery bracket, Canon PH15x7 BIRS Lens w/2x estender, Thermodyne CC-440 hard case, Portabrace RS250/5 rain slicker, and Portabrace CC-250-22 Quick Draw case. Package Price \$46,000!!** Call Pronghorn Productions, (307) 332-9714. 9/95.

**JVC, BR-S777V, S-VHS, VHS, Three-In-One Duplicator with RM-7030 Remote Control and Rack Mount Hardware.** Very Low Hours. Mint Condition. \$2,995 including shipping. Call Doris (516) 285-7146.

**AU-63 with AT.** Very low hours. \$4995. **AU60 Studio Recorder.** Excellent condition. \$4995. Call Tom Whaley at (419) 621-0602. Sandusky, OH. 6/95.

**SANYO Factory Demo. GVR-S955 S-VHS** editing VCR's with built-in LTC timecode reader/gen., BCD animation RS-232 controller, Sony protocol RS-422 edit control port, 55 db digital video noise reduction, frame accurate, 4 ch. audio input switcher, 2Y-C & 2 composite video inputs, \$1,595.00. (List price new \$3,495). Package deals available with FAST Video Machine, TAO Editizer, and/or Alladin 3D DVE. Complete turn-key computer systems, \$CALL. DPS PAR and Perception boards, 3D Studio, Animator Studio, Topas Prof., Flying Fonts for Windows, Lightwaves 3D, \$CALL. DSC Chyron Illusion #D DVE loaded, \$3995.00. WIEGAND AUDIO VODEO LABS. (800) 203-3260 or fax (614) 967-4453.

**AU-63 Player, w/dynamic tracking, p.o. 4980, d.o. 0127, \$3900.** Two AU-65's, p.o. 0729, d.o. 2870 and p.o. 5510, d.o. 1350, each \$4100 or \$8000 as a pair. Only used by Grandma on Sundays. Contact Reed Zulauf at Puget Power (206) 462-3509. Fax (206) 462-3214. 5/95

**TAO Editier 3.1 A/B Controller.** Works on any PC or better. Works with professional & pro summer decks. Generates & reads SMPTE time code. Controls Toaster, MX50, ALAden, and many more switchers. 7 GPI. EDL management, creates logs, time line, or edit on the fly. Much more. \$1500.00. Hawaiian Image Video Productions. Ron Darby (808) 531-5474.

**Panasonic AU-650 MI Excellent Condition.** Well Maintained. 4 Channels of Audio. Time Code. Slo-Mo Dynamic Tracking. 2 machines. \$5500 each. **Panasonic AU-60 MII Studio Recorder.** Works great. Well maintained. 4 Channels of audio. Time code. \$4900. **Panasonic 200CLE 3 Chip Camera** in very good condition. \$2900. Grass Valley Mod 1600-IX Switcher. \$3900. Very good condition. Comes with very long snake for remote mounting. Brian at (716) 654-6710.

**AU-62H Player, AU-63 Player w/Dynamic Tracking QU-65 Recorder/Player, AU-55H Portable Recorder, JVC KY-27 Camera** (Includes: Fujimon 16:1 Lens, MII Back, Studio Kit, JVC RMP-2000 Remote Control, Cables, 8 Batteries, Charger/AC Adapter Bogen Tripod and Plate). All equipment in excellent condition and priced to sell. Please call Digital Arts (210) 692-1776.

**JVC KRM-800U Edit Recorder, \$2900.** Or trade JVC-BRS-811U Edit Recorder/SAF-911. JVC Editor in Good Condition. KRM-800U. Call Kevin Boland at Electric Images Video at (805) 937-3196.

**NEC SP3A Camera** docked top Panasonic AU400 MII Recorder. 3-Chip (similar performance to Sony BVP30). Excellent condition. 600 hours on deck, porta-brace case, Anton-Bauer bricks and charger. Package priced \$5500. OBO **Panasonic AU400 Dockable recorder** (plus adapter to Sony/NEC cameras) four channel field recording and in the field playback (without an adapter!) - 600 hours on deck, great shape, recently aligned. \$2500. OBO. **Panasonic AU500 field recorder/player.** Four channel field recording/playback. Will work as a source deck in edit system. Timecode in/out. New Porta-brace case. Adapter for

Anton\_Bauer bricks. Very good condition. Recently aligned. \$2500. OBO. **JVC-KRM 800 MII studio edit recorder.** Less than 50 hours on new heads. Zero hours on complete factory service center realignment. Deck is in excellent mechanical condition. \$3500, OBO. **NEC SP3A 3-Chip Camera.** High performance 2/3 chip block. Will dock to any Panasonic MII or Sony Betacam product. MII adapter included. PortaBrace case. Anton-Bauer brick adapter. Camera recently overhauled by NEC factory service center. Performance similar to Sony BVP30. Excellent condition. \$3500, OBO. Contact Rick at Gulfstream Production Group (813) 522-3000.

**AUW-32 MII Player, AU-33H MII Player w/ Dynamic Tracking, AUW-35H MII Editor.** All units 'like new' from NAB Las Vegas Show. Also, AU-45H MII Dockable Recorders all at BIG SAVINGS!!! Call Jim or Don at (412) 898-1630.

**Panasonic AU-410s recorder** docked to **Panasonic 300CLE camera, without lens,** excellent condition \$6400. Call Don at (613) 821-7783.

**JVC KRM 800 Editing VCR.** Excellent, 400 Hour Use. New upper head with zero hours. Used as backup. No longer needed. \$3500. Bob Benson Video Film (508) 432-1200. (508) 430-1184. 3/95

**Videotek Prodigy Switcher 10 input,** chroma, luminance 7 DSK, & G-MEN; Magni Vectorscope" V553; Tektronics "Waveform" 528; Tektronics "Waveform" 1480R; RM-p3 Remote CCU for Sony Camera; 2 JVC TM-R14u Video Monitor 14" with underscan, blue, B minus color, A/B, RGB; 2 Panasonic WV 5350 B/W Monitors in Dual Mount Tray; O'Connor Model 30B tripod hd; ALR Computer 386/4MG RAM/300HD; NEC Multisync 2A Color Computer Monitor; (2) Spool of RG/SQU Coax (1000 ft. ea.); Custom Console 5 Bay with area; (2) Electro Voice Sentry 100A Studio Monitors w/wall brackets; Leader 5860 C Waveform Monitor (NTSC); Leader 5860 C Vectorscope (NTSC); AVL Data Booster Isolator (4); AVL Power Control; Barco RGB Distribution Amp with Sync; Ace Component Converter ASC200/732-732-731 Cards; Videotek VSC-21 Signal Generator; Chyron ACG 4mg/20HD Contact Dan Hall at Video Management Systems. (317) 841-1212

1 Abekas A-53D Single Ch., \$21,000. 1 Alta Pyxis E (Dual TBC w/FX/Full Frame) \$1500. 2 Audio Digital Add-2 Digital Processor \$300.00 ea. 5 BTS LDK-91 w/Fuji 18X w/2X VGC \$25,000 ea. 3 C.E.L. P147-20 Frame/Store Synchronizer w/P-151 Control Panel (Doc/Joystick Position/FX) \$2,200 ea. (\$15,000 new). 1 Chyron 4200 EXB/MGM/Dual Chnl. Never used in truck/full studio. \$8500. 1 Hitachi VO-99 Port. Waveform Monitor \$600. 1 Hotronics AH-91 Dual TBC w/FX/Dual Out (Y/C Composite/Dual TBC), \$2000. 1 FOR-A FA-410 Full Frame TBC, \$1000. 1 FOR-A VPS-300 Like New, \$21,000. 1 Grass Valley 100 Switchers Loaded with all options + E-MEM Option, \$8500. 2 JVC KY-210 Studio 3-

**Tube Cameras, \$1900ea.** 2 JVC RS-500U 19 Pin Out/Connect for KY- Series Cameras, \$1900 ea. 1 Laird 1500 Character Generator, \$1200. Contact Charles/Bill/Steve/Joe/Ed/Paul at ((813) 546-6407.

**Edit System; JVC BRS6114 to JVC KMR800 (new heads)** using JVC RM-88U as controller includes 2 cables) \$5750. Contact Bill Tucker (518)356-0334 3/95

**AU-65H MII Studio Edit Recorder.** Dealer demo with full warranty. \$8250. **AU-63H MII Studio SLO-MO Edit Recorder.** Dealer demo with full warranty. \$8250. Call (800) 451-1425.

**KR-M820U Editing Recorder.** Has TC Board Installed. \$3000. **KR-M800U Electronic Editing Video Color Cassette Recorder.** \$2500. Save \$500 by purchasing both - pay only \$5000. You pay shipping. All sales final, equipment purchased "as is". No warranty available or implied. Since we are a state run facility, all items must go out to bid before sale. Contact Jim Gaar at (816) 235-1096.

**4 Panasonic Au 300 B 'M' Format, 1 Convergence 195 Edit Controller.** Contact Don Eckis at (509) 547-0547 2/95

**Sony BVU 25 Beta Portable with AC.** \$4000. Call Dave Andrews at (801) 272-3031. 1/95.

**AU-63H MII Studio edit recorder.** Dealer demo with warranty-\$8250. Call (800) 451-1425. 1/95

**Panasonic AGA800 w/RS422 cables, \$3150. Panasonic AG7750 w/TC, \$4230. Panasonic AG 7650 w/TC \$3384. Hitachi Z One - B w/AG 7450A w/TC, \$11,365.** For details, contact Bill at (503) 598-9142. 1/95

**Ampex ADO 100, \$11,000.** For info, call Neil Stewart at (713) 333-1523 or Fax (713) 335-7816. 1/95

**Panasonic Supercam AGDP800XL with 14x Lens, Case, Tripod Plate, 2-Anton Batteries & Charger, \$7570. Panasonic AGDS840 Source VCP with Digital Slo-Motion. \$4360. Shure M267 Microphone Field Production Mixer, \$380. Mackie CR1604 16x2 Audio Mixer, \$725. Eiki LCS200 Data Video Projector, connects direct to computer, \$7550. Call Greg at (607) 687-0545. 1/95**

**MI Studio Recorder/Player, JVC KRM 800u,** used at authorized repair shop, fully tested, brand new head, \$2950 or best offer. Call Tom Miller at (406) 222-6733.1/95

**AU-65 w/ AUF65 \$5,000, AU45H never used/full warranty \$3999** Call for details. **2-AJ-D350 Panasonic D-3 Recorder, \$33,000. ea 1-AJ-D320 Panasonic D-3 Camcorder \$25,000.** Contact Juan C Carrillo (305) 592-2034 10/94

**Panasonic AU-65's Edit Recorder, \$5000.** Call Vin Sisson at (216) 527-2182 11/94

**FORA CVM 400 6-input component switcher, 2yrs. old \$10,000. Sony VO 4800 3/4" field recorder \$750.** Chris Turner (318) 325-1544 9/94

**Must Sell! AU65H Editing VCR.** Like new! New drum has only 150 hours of use. Low "power on" time. 1.5 yrs old. Full documentation and manuals included, \$7500 or B/O. contact Bruce Edwards (714) 583-7837. 9/94

### Facilities/Suites

**MII A/B/C Roll Full Component Suite W/MATROX:** Panasonic AU-65 MII edit/recorder w/TC, AU-63 & AU-62 edit source w/TC, Matrox Studio Post Production System w/ Titania 3-D DVE, ALR EISA 486-33, 17" svga monitor, Sony LVR-5000A CRV laser disk signal processor & recorder/player, Sony VP-9000 SP 3/4" player, Sony VO 7600 VCR, Panasonic AG-7750 S-VHS edit/recorder w/TBC, Panasonic AG-WI standards converter, 2 Sony PVM-1342Q monitor, Nigel B Senior workstation; **INCLUDING SOUND SUITE:** Soundcraft Delta Ave Audio Mixer w/1 master RS-5059, 4 D221 RS 1443, 4 D203 RS1443, master RS 5061, Stantron turret desk, Tascam MSR-16S w/Dolby, Tascam RC-416 remote, Adam Smith Zeta 3 A/V Midi; **ALSO INCLUDING MII FULL COMPONENT CAMERA EQUIPMENT:** Panasonic WV-F700MH digital 3 chip camera w/Canon J15x9.5 BRSII Zoom, Panasonic DKT700M MII docking kit, Panasonic AU-410 docking MII recorder, Sony PVM-8044Q component 8" monitor w/batteries, O'Conner Series 55 tripod system, Lowell lighting systems, INMACS UPS 1200 and Fortress 2KVA UPS, and more. Asking \$70,000, or take over leases at approx. \$4500/mo. for 14/18 mos. Buyer pays shipping. Please call Richard or Michael at (310) 696-1046

**MII A/B ROLL FULL COMPONENT EDIT SUITE,** includes: (1) Panasonic AU-60 MII edit/recorders w/ TC, (1) JVC KR-M820U MII edit/recorder, (1) JVC CR-M850U 3/4 edit/recorder, Paltex Europa Edit Controller 7 status monitor, JVC KM 3000 Seg/switcher, Microtime Genesis Act1 DVE, (1) JVC KM-F250 TBC, Laird 1500 Character Generator, Lenco RGB-Composite Encoder, Panasonic BT M1310Y monitor, Sigma CSG-460 Sync Generator, Sigma SVC-213 Routing Switching, Winstead 5 bay rack mounts. Full Documentation included. \$39,000. *May consider pricing out.* All well maintained. Buyer pays all shipping. Contact Jodi Heurung, (612) 935-0033.

A/B ROLL EDIT Suite, includes (2) Panasonic AU-65's Edit Recorders, (1) AU-63 slo-mo player, (1) Panasonic AG-7750 SVHS Edit recorder, Alta Pegasus switcher, For-A 3000 3D DVE, Inscrubber CG package w/ 486DX2-66 PC, Editing Technologies "CMX style" editor w/ serial control, Tascam 688 midi studio 8-track cassette, audio router and mixer, System wired Y/C, all cables furn., system is working and producing programs daily. Asking \$39,000. **Panasonic 300 CLE camera w/ full studio kit, \$3,500. Panasonic AU-400 MII dockable recorder w/ VT-10 docking adapter for 300CLE camera, \$3000. ITE-40 tripod, \$300. Call Vin Sisson at (216) 527-2182 11/94**

### Tapes

**3M New MII Videotapes-** Length 10 min./Price \$22.25/Quantity 25; 20 min./\$25.75/30; 30 min./ \$29.69/34; 60 min./\$44.49/25 90 min./\$66.79/11. All sales final. All sales final, equipment purchased "as is". No warranty available or implied. Since we are a state run facility, all items must go out to bid before sale. Contact Jim Gaar at (816) 235-1096.

**Used MII Tape,** limited number of MII tapes, Large cassettes, 30's, 60's 90's and small 20's, Most with low passes, most with factory cases. Good for many purposes. Buyer pays the shipping charges. Contact **Ed McKay or John Bishop at (704) 398-0046, or fax (704) 393-8407 (NC).**

If you have equipment you would like included in the next Trading Post, please contact us in writing, either by fax or mail at MII Users Association of America, c/o GMG International Inc., 1950 Roland Clarke Place, Suite 100, Reston, VA 22091, fax (703) 620-0451, toll free 800-966-1030. *Please contact us when the equipment is sold.* □

## MII Users: If you don't already have one, you are definitely going to want one...

### United Media's MVS duo Editor

United Media provides a complete desktop solution for your MII production/post-production needs



#### MVS duo Editor

Specifically designed to give you total control of the Alladin. This powerful and affordable A/B Roll editor offers full control of the Alladin for ease of operation and seamless integration, price includes total interface **\$ 3,495.**

#### UNITED MEDIA OFFERS THE MOST SOPHISTICATED CONTROL OF THE ALLADIN DIRECTLY FROM THE MVS duo's SOFTWARE

- Both the MVS duo Editor and the Alladin reside in the same computer
- Seamless interface provides full control of the Alladin's effects, graphics, timeline, picons (picture icons) from the MVS duo screen
- All four Alladin layers (layer A, layer B, Program and Preview) available from the MVS duo screen for ease of selection
- Alladin Graphic picons and Effect picons displayed on the MVS duo screen for ease of access and recall
- All Alladin information stored in the MVS duo EDL for recall
- Simultaneous control of 3-7 VTRs, Alladin and Audio from a single plug-in PC board
- Control of other Video Switchers (GVG 100 / ESAM protocol), Audio mixers and digital devices

For more information on United Media's MVS duo Editor or our other Desktop Editing Products contact your local dealer or call us at (714) 777- 4510.

UNITED MEDIA 4771 E. Hunter, Anaheim, CA 92807 USA (714) 777- 4510 Fax (714) 777-2434

## No. We're not kidding!

On-demand, custom-created 3-D animation from America's fastest growing facility on D-3, MII, and Betacam SP... delivered any where in the world!

**1 (800) 966-6689**

Ask for Mike Loftus for the latest Demo-reel and free estimates.

GARDY McGRATH'S award-winning graphic artists are waiting to work their magic for your animation needs. From Fortune 500 corporations to virtual reality programming, our rates are so competitive that our cost per finished minute is often less than what some charge per finished second.

Custom-designed, on-demand animation...another in a full spectrum of services from America's One - Stop Video Shop...GARDY McGRATH INTERNATIONAL.

*Featuring Lightwave 3-D Software  
with the Raptor RISC renderer!*

## We're not afraid to make a scene.

## Turn Betacam production clients into MII Users!

### *Betacam/MII or MII/Betacam Transfer!*

Now available to MII User Association Members at reduced rates!  
48 hour turnaround for quantities of up to four tapes (via Federal Express)  
for both "S" and "L" size Betacam cassettes.

Services supplied by **GMG International** at the following rates  
(which include the cost of tape):

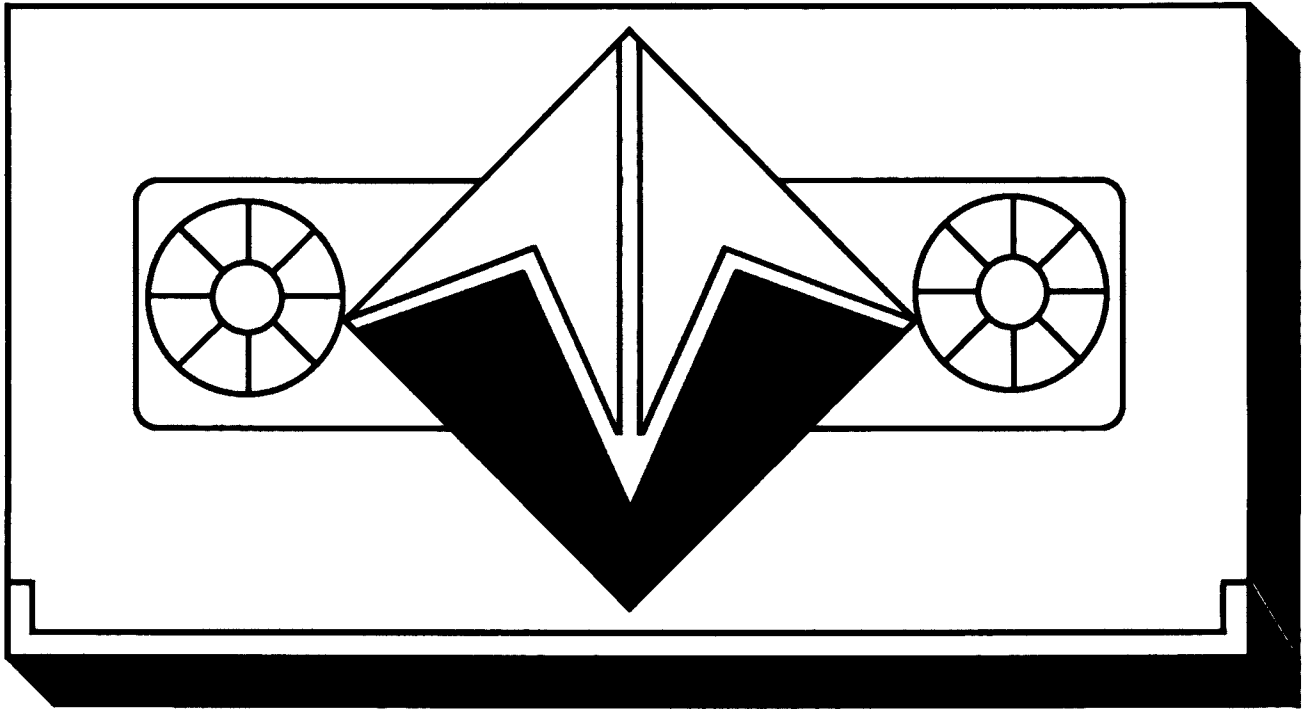
up to 20 minutes	\$37.00/dub
up to 30 minutes	\$55.00/dub
up to 60 minutes	\$105.00/dub
up to 90 minutes	\$155.00/dub

(Shipping not included)

Call 1-800-966-6689 or (703) 620-6000 and ask for **Cam Strickland**.



# **Advanced Audio/Video *Duplication***



- ♦ JVC Licensed
- ♦ Macrovision (copy protection)
- ♦ MII, 1", 3/4" SP, Beta SP, and S-VHS source equipment
- ♦ Conversions to and from PAL, SECAM
- ♦ Competitive Pricing
- ♦ Fast friendly service
- ♦ Complete fulfillment services
- ♦ Drop shipping to anywhere in the world

**We're here to serve you!!**

**1-800-368-0406**

**Denver, Colorado**

**A full service duplication facility**

# SPECIALIZED COMMUNICATIONS

"PROS" SERVING "THE PROS"

Since 1985

Television Networks

Corporate Television

Cable Television Companies

Video Production Houses

TV Broadcast Stations

Professional Video Users

## SERVICE IS OUR BUSINESS

Impeccable Maintenance

Reliable Technical Support

Replacement Units

Custom MII Enhancements

Flexible Service Contracts

D3, MII Parts Fabrication

Factory Trained Techs.

Competitive Prices

## AUTHORIZED INDEPENDENT MII SERVICE CENTER WARRANTY REPAIRS

Specializing In :

Original and New MII

BetaCam SP

Umatic, S-VHS, VHS



Authorized For:

Panasonic Professional

Sony Professional

JVC Professional

Now Factory Trained For D3 Service

**CALL 1-800-359-1858**

# A BREAKTHROUGH IN REAL TIME IMAGE ENHANCEMENT

Use military technology to perfect your MII video quality.  
Increases clarity, sharpness and offsets processing degradation  
with the press of a button.

• BROADCASTING

• SPORTS

• COMPRESSION



VIDEO  
EQUALIZER

• FEATURE FILMS

• NEWS

• REALITY  
PROGRAMMING

**Plug in and play. Requires no additional hardware.**

Model No.	I/O	Price
QVE 1000	YUV, YC	<del>\$17,950</del> <b>\$14,950</b>
QVE 1500	YUV, YC, Composite	\$20,950
QVE 10000	D1, D5, YUV, YC	\$25,950
QVE 15000	D1, D5, YUV, YC, D2, D3, Composite	\$30,950

## SPECIAL INTRODUCTORY OFFER TO MII USERS: \$14.950

<b>PROCESS TIME</b>	Real time: 70ns delay	<b>CONTROLS</b>	Detail: Controls kernel size Contrast: Controls high frequency gain Background: Controls low frequency gain
<b>ALGORITHM</b>	Two-dimensional convolution		
<b>KERNEL SIZE DIAMETER</b>	Up to 10% of image size		
<b>BANDWIDTH</b>	12MHz @ 3dB, 30MHz also available	<b>PRESETS</b>	Bypass, split screen, user selectable preset values
<b>SIGNAL TO NOISE RATIO</b>	Better than 55dB	<b>REMOTE</b>	Available via 9-pin DIN
<b>INPUT/OUTPUT</b>	Analog color difference (Y, R-Y, B-Y), S-VHS (Y-C) Analog composite Digital color difference (D1, D5) Digital composite (D2, D3)	<b>POWER</b>	120/240 vac, 60/50 HZ, 55w maximum
		<b>DIMENSIONS</b>	19" x 13" x 3.5" (48.25cm x 33cm x 8.25cm)
		<b>WEIGHT</b>	8 lbs. (3.5 kg)

FOR INFORMATION CALL:

**TEL: 310-696-1046    FAX: 310-693-9135**

Ask for Chris Mengel or Tricia van Klaveren

**ORDER NOW!**



13006 Philadelphia Street, Sixth Floor, Whittier, CA, 90601



## THE KREGEL REPORT

*Mark Kregel is owner of North Star Television in Aberdeen, MD. He is a recent TV Production/Filmmaking graduate (Mass Communication) from Towson State University in Baltimore. During college he completed internships at both Maryland Public Television and The Discovery Channel. He is currently building an MII edit suite for the production of TV broadcast documentaries and other educational television programming.*

### THE EVOLUTION OF EDITING SYSTEMS: TRADITIONAL, NON-LINEAR AND DESKTOP

There is a revolution taking place today in modern video production work. For those among us who are only superficially involved with video production work, this revolution may be going on almost unnoticed. However, for most of us, especially those in higher post production and broadcast applications, this revolution has been analogous to being inundated by a tidal wave. At first we were all standing there on a beach, and with little warning a wave rose up on the horizon. Next we were standing in the shadow of this wave as it rose to block out the sun, and finally we are now finding ourselves fighting churning water trying to figure out which way is up and which way to the surface. This wave is commonly being called the "digital revolution." However, there is actually much more to this revolution than the simple use of the term "digital." Personally, I would describe this

revolution as follows. This revolution is the wholesale integration of the traditional video of five or ten years ago with modern computer platforms and with modern information processing and storage systems. The term "digital" is really somewhat secondary in this revolution. Digital signal use is a common thread to this revolution, but really this term is just referencing the type of language that modern computer and information processing systems use. In order to effectively harness the new video production computer based systems, one must use the digital language. What are both the short and long term implications of this revolution for those of us entrenched in the video production industry, specifically with regards to existing video production systems? This topic is receiving a great deal of attention in modern industry literature. And due to its relevance to MII users, we will draw yet another perspective on it here.

A state of the art editing system ten or fifteen years from now will likely consist of the following ... a) a desktop supercomputer that is as powerful compared to today's systems as today's systems are compared to systems of ten years ago ... b) extremely large quantities of memory and storage tied into this computer processor to include very refined and powerful "hard drive" units that are both removable and easily transportable ... c) cameras systems (acquisition for system) that will allow direct recording onto these refined "hard disk" systems (akin to the Avid/Ikegami camera today) ... and ... d) circuitry and buses within these computer editing systems that will allow for work at the HDTV video production level with near "real time" video output editing capabilities.

There is basically no denying that digital computer technologies are the future of video production work. It is as clear as chalk on a blackboard. But in terms of current

production needs that a company might have, there are many other concerns directly related to this equation. From an investment standpoint for instance, we must ask ourselves ... Are these systems currently mature enough to invest in or are they still in their infancy to such an extent that investment is risky at this time? And if such a system were to be deemed cost competitive at this time, how much more system would actually be available for the same money two years or even a year from now? This is where we are finding ourselves churning in the digital tidal wave surf.

Let's look again at our tidal wave analogy and take it one step further by asking the following question ... What is the best way to transition this digital wave and still keep one's head above water? Or even better, what is the best possible way to ride this wave and to exploit these technologies with the least risk of capital (i.e. life jacket or surf board)? Should one go out right now and ditch all of their existing video equipment to jump head long on the digital "band wagon" (digital from camera to finished product)? There may in fact be some current market applications for such an approach. However, I would personally recommend a much more conservative train of thought on this topic. This is as follows. Contrary to some modern industry hype, "digital video" is not an end-all self encompassing term. You have digital signal processing cameras, camera based acquisition and/or storage (tape or disk), computer based editing system storage (tape, disk, other), computer digital signal processing components and internal storage needs, buses, software packages, compression, CPU speeds, RAM, ROM, etc. And each of these specific technological areas is evolving at its own pace and with its own engineering based limitations.

My "surf board" advice on these matters

is as follows. First of all, realize these different technical categories for what they are, specifically the differences between "storage" (tape, disk, CD ROM, etc.) and "signal processing" (CPUs, compression, signal flow, bus limitations, etc.). Then, study and know each of these specific aspects/categories of digital video production and the strengths and merits of each. And as each of these areas evolves to a level of maturity that is adequate for your needs, then begin to adopt these technologies into your production systems. Two quick examples of this principle are as follows. Digital signal processing cameras are currently well on their way to very respectable levels of maturity, specifically I would point out the Panasonic WV-F565. However, hard disk storage space costs and rendering time requirements for most non-linear systems are still both extremely high compared to what they will be five years from now. These are both areas that are undergoing fast and intense growth towards marketable maturity. The digital tape formats are also still relatively expensive compared to a five year outlook, and especially when compared to the economics of scale of existing analog tape formats. Is it possible to mate existing video production assets with the newer digital systems in such a way to allow for gradual and calculated transition? There are approaches to this, and as we continue with our look at editing systems, we will attempt to explore this further.

The two figures on the next page illustrate the extremes of video editing systems that we will be discussing. On one hand (Figure A) you have the standard broadcast grade editing system of say five or ten years ago. On the other hand (Figure B) you have the evolving non-linear based system akin to the one mentioned earlier in the article (the future system). The physical differences between these systems are obvious. One is large, requires masses of cabling, and is built

more or less on the "black box" approach i.e. each component such as the switcher, edit controller, titler, etc., is purchased separately and assembled into the system. The other system typifies compact size and the integration of almost all editing functions "under one roof."

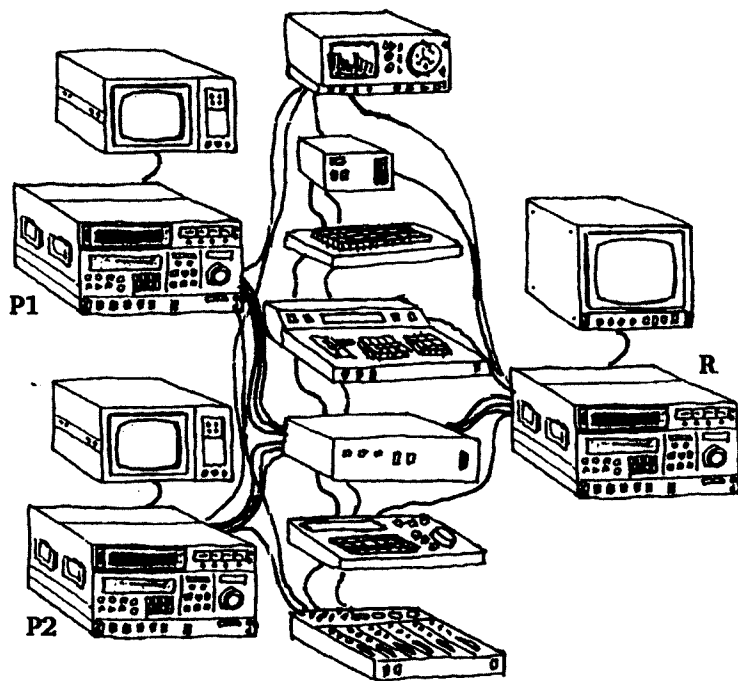


FIGURE A (Traditional System)

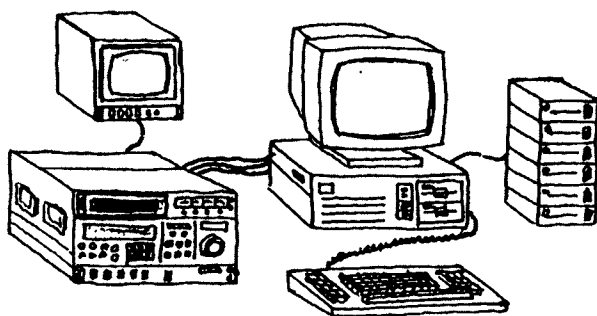


FIGURE B (Non-linear)

With regards to these systems it is important to note a few key points. First, there are countless Figure A type systems currently in existence. Systems of this type though large and segmented in construction are still the current mainstay of our television and video production industries. The digital revolution is taking place but in reality it will be years and perhaps even a decade before this transition fully settles out across the board. The implications again are that it will pay to be flexible in this transition. Also by and large the nonlinear systems out there today are still fighting to achieve output quality levels of traditional BetaCamSP, MII or Type C 1" machines while still maintaining reasonable throughput and rendering times. It is important to note that when using a nonlinear system that edits purely within the computer, when a transition such as a dissolve is done within the system, the computer must go though and calculate every line of every frame of this transition for the finished output video. This is so-called "rendering time", and it is not uncommon with some of today's non-linear systems for rendering time to take a half hour or more for every minute of finished video when using dissolves and other creative transitions. A common practice with these systems is to edit by day and then leave the computer on throughout the night to render the finished program. In contrast to this you have the traditional Figure A type system. In the traditional system once the VCRs are cued and rolling feeding through a switcher, a dissolve or any other transition is as real-time as you can get. Is it possible to bridge technologically between the Figure A and Figure B systems outlined above? Let's now look at two approaches to this problem, and introduce the term "hybrid" editing system.

It is relevant at this point to touch yet again on the division between acquisition and editing. Unless you are doing a video completely based on computer animation (i.e.

a program on astronomy), or are using some form of file footage, you must go into a shooting situation either studio or field to acquire source material for your video production project. For traditional video, a cassette tape is the bridge between acquisition and editing. With the emerging digital systems, this bridge will likely evolve into a removable hard disk such as the Ikegami/Avid camera concept. Whatever this bridge is though (analog tape, digital tape, disk, i.e. basically any form of storage) it is a fundamental building block for both your camera system, and your editing bay. It is possible to have the best non-linear computer system currently available sitting on a table or rack mounted just like in the print advertisements. But if you don't have some means to both feed video into and out of this system, it is just so much hardware. The VTR (of a given video tape format be it analog or digital) is still the standard in these regards just like it has been for traditional systems for all these years. And in contrasting tape vs. disk for bridging this gap, it is likely tape will be right in there with disk for quite some time.

Having said this, let's now look at Figure C. What we have done here is basically as follows. We have kept the VTRs such as with the traditional system, but have replaced all of the other separate "black box" traditional components with a single computer platform. This computer acts as switcher, edit controller, audio mixer, titler, graphics and paintbox integrator, DVE, and as a platform for computer based animation. The primary characteristics of this system are as follows. Ten years ago, a full blown traditional type editing system (Figure A) would easily have cost hundreds of thousands of dollars. The price of this Figure C computer based edit system today even with broadcast grade VTR's is just a fraction (perhaps a quarter) of that amount. Such a system edits using digital signal computer based processing allowing for very high potential output quality levels. These systems also commonly use a "time-line" based edit control screen which is very analogous to non-linear based edit systems. Such "time line" systems allow you to preview your work basically as fast as the decks can be spooled, and allows you to change your EDL basically indefinitely before finally committing to an on-line edit to your record VTR. All transitions are real-time with this system (i.e. no non-linear rendering time).

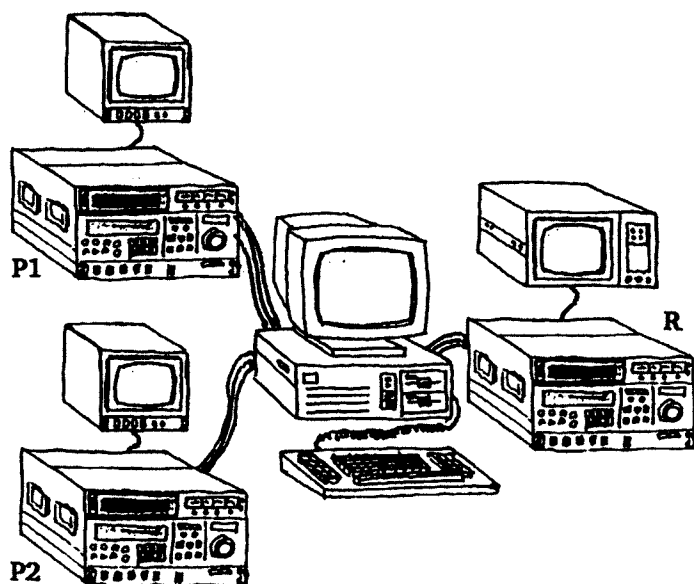


FIGURE C (Desktop)

Along the lines of relying on VTRs in such a system, let's again differentiate between storage technologies and signal processing technologies, and identify how traditional analog tape formats tie into this. There is no doubt that digital signal processing has numerous advantages over older analog signal processing methods. The primary of these advantages is the retention of signal quality with digital systems (i.e. the elimination of generational losses associated with the older analog signal processing systems). However, in terms of locking a video signal onto a tape (storage) the differences between analog and digital are much less notable. Even in this



digital age, the analog tape formats, specifically the component formats BetaCamSP and MII are still extremely potent at what they do. BetaCamSP (a component analog format) has even become the standard that most non-linear and desktop digital systems are trying to achieve. Carrying this point even further to include the digital tape formats, in terms of a cost per minute ratio for recording a broadcast grade video signal (the costs of decks and tape stock), MII specifically continues to offer the greatest "value per dollar" of any format analog or digital. Based on currently quoted costs for VTRs, even if DVCPRO were available today it would still be roughly twice the cost of MII in this signal per dollar regard. The bottom line to all this is as follows. Steer to digital signal processing when at all possible (cameras and editing systems specifically). However, don't underestimate analog tape storage (specifically component analog MII) in terms of both signal quality and cost to both acquire for and record from your editing system, whatever that system might be.

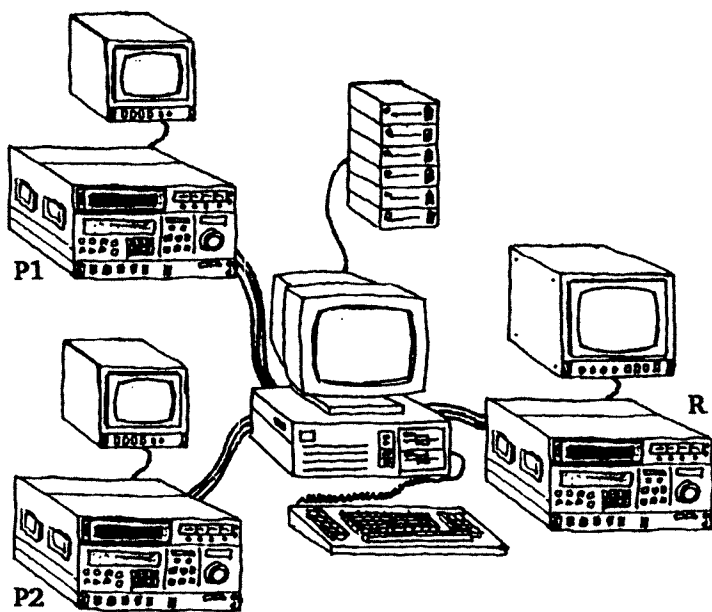


FIGURE D (Hybrid)

Let's now take our editing system evolution one step further. In Figure D we have a similar layout to Figure C, but with one key addition. This addition is what I will call a "non-linear add-on" (basically lots of hard-drive storage added to the system). I am calling this an add-on because this system still retains its VTRs even with the non-linear interface. And as such this package has a wide range of both capabilities and features. First, the system can use only its VTRs as sources for straight on-line quality level work. Secondly, this system can be configured to use this non-linear package as a "third VTR" to allow for A/B/X traditional style editing (in real-time through the switcher). Thirdly, such a package could be used solely as a non-linear system if the compression and rendering time concerns were within reason for a given project. And finally, such a system will also allow you to work very quickly in a pure non-linear mode to "off-line" your program, then to go back to tape to create a final "on-line" edited version. This type of system is currently the ultimate "hybrid" system. It allows across the board editing from working with video tape shot three years ago to the integration of the latest computer animation packages into a video. Such a system also allows you to upgrade specific system component areas as your needs and demands require, and as technological growth allows.

For completeness sake, let's now touch again on the current dedicated state of the art non-linear system (i.e. non-linear only) as illustrated both in figure B and in Figure E on the next page. This system though using a VTR for input and output is otherwise pure non-linear. Using the VTR first as a source, video is recorded into the computer's storage. Next using a time line based edit control system, you outline and maps together your desired final program in an "off-line" quality type of mode. Finally, you let the computer render a final finished version of the video

which is dumped back to tape at the VTR or is perhaps even sent directly to air in a broadcast application. Are these systems really at MII, BetaCamSP, or D-1 quality yet with reasonable rendering times? Some are close but most still have a long long way to go. And the ones that are at this broadcast quality level are charging what might be termed "traditional" sticker prices.

The following terms are property of their respective owners: BetaCamSP, MII, DVCPRO, D-1, D-5, Type C 1", Avid and Ikegami.

Please forward any comments regarding this article to: North Star Television, 1403 Ronson Ct., Aberdeen, MD 21001 c/o Mark Kregel

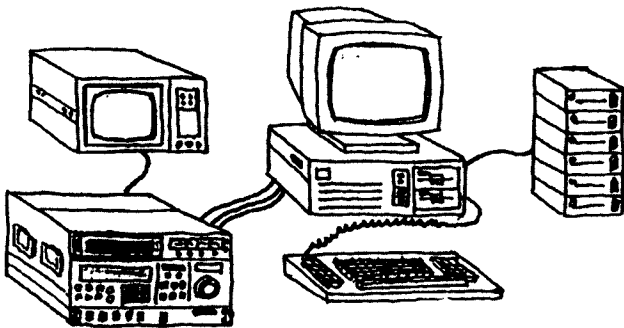


FIGURE E (Non-linear)

What system do you buy or build for your specific needs. If you are happy to work in SVHS quality (Y/C or composite) a currently available dedicated non-linear system may be your clear answer. If you are working in broadcast quality BetaCamSP or MII (Y,Pr,Pb component) a hybrid system might be more a reasonable alternative until the non-linear systems achieve greater maturity. And if you are looking for D-1 through D-5 quality, you may be stuck with a traditional style digital switcher for some time to come. The choices are many.

# ultra-sound a/v

for all your tape duplicating needs

10108 Timberlake Road / Lynchburg, VA 24502 / 804 / 237-4549 / fax 237-4982

## Ultra-Sound:

We have been duplicating

quality video programs for over six years.

We use the highest grade tape and shells in order to provide the best possible product. We also perform a quality check on each and every tape that is duplicated to insure and maintain a high standard of excellence. Please call us for a quote on your next duplicating assignment. (804)-237-4549 or fax (804)-237-4982

### Our Commitment: Quality, Dependability, Service

#### Quality

Premium shells  
Real time duplication  
Back coated video tape

#### Dependability

100% guarantee  
100% quality control  
Your deadline always met

#### Service

One stop shop  
Fulfillment services  
No extra for rush orders

---

MII Users Association of America  
c/o GMG (International), Inc.  
1950 Roland Clarke Place, Suite 100  
Reston, VA 22091

